

## **Abstract**

The primary objective of the present method and apparatus is to provide a portable and new diagnosis system for a quick and reliable examining tissue conditions. The method uses the most advance miniaturized MOEM system for generating a rapid variable optical delay line to be able of generating wideband terahertz pulses. The method has objective to detect and analyze cancerous tissues by comparing a plurality of spectrum resolved images of suspected tissue without applying harmful agents into the tissue to facilitate interaction with illumination sources. The method employs non-evasive, real time terahertz imaging systems and techniques to diagnose tissue for detecting the presence of cancer. A map showing, which tissue is healthy and which is cancerous can aid in the accurate removal of cancerous tissue.